(No Model.)

3 Sheets—Sheet 1.

# F. H. MORSE.

## SECTIONAL HOUSE.

No. 306,942. Patented Oct. 21, 1884.

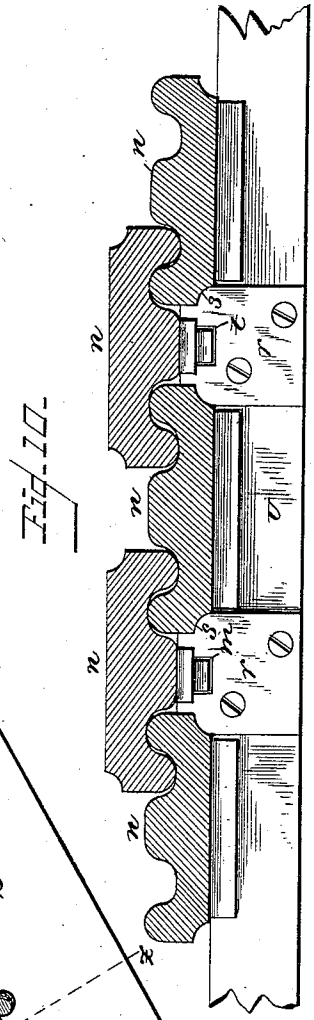


Fig. 10.

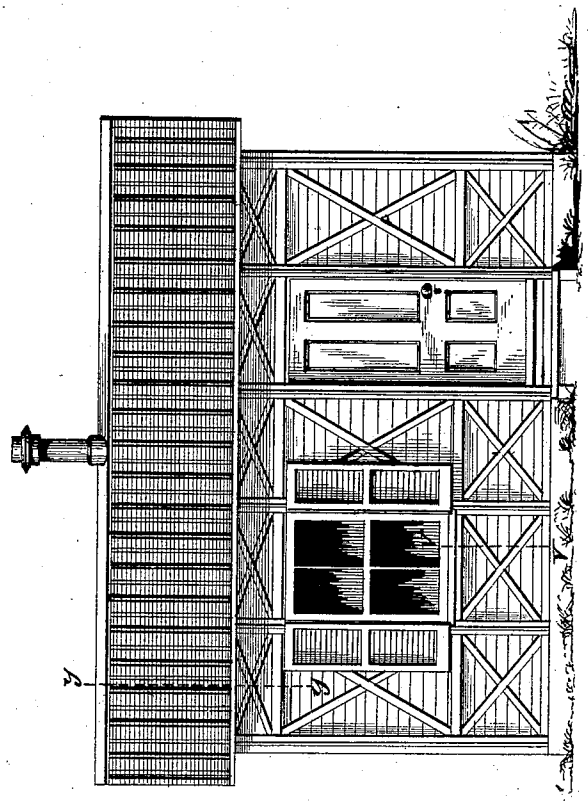


Fig. 7.

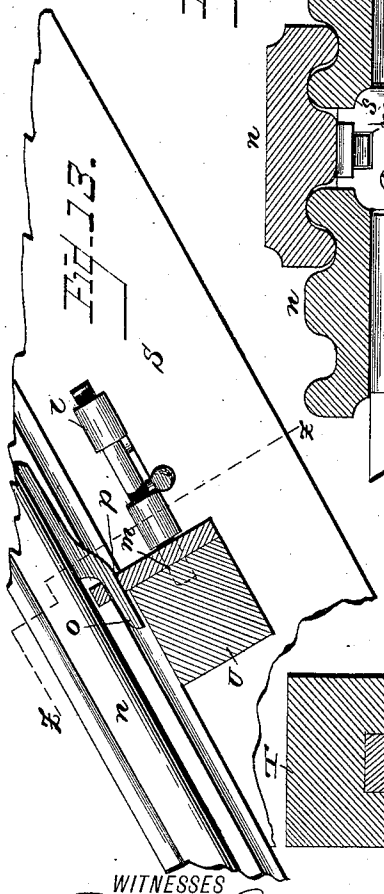


Fig. 13.

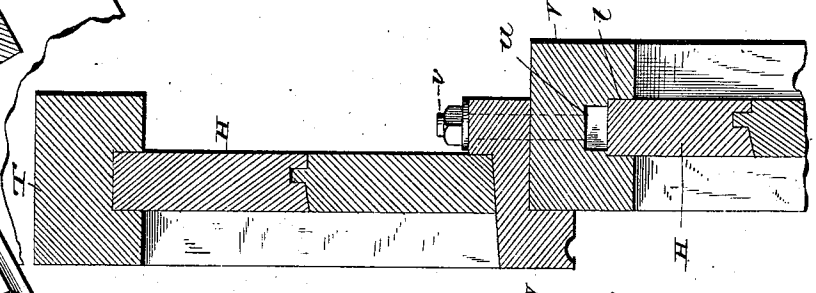


Fig. 9.

WITNESSES

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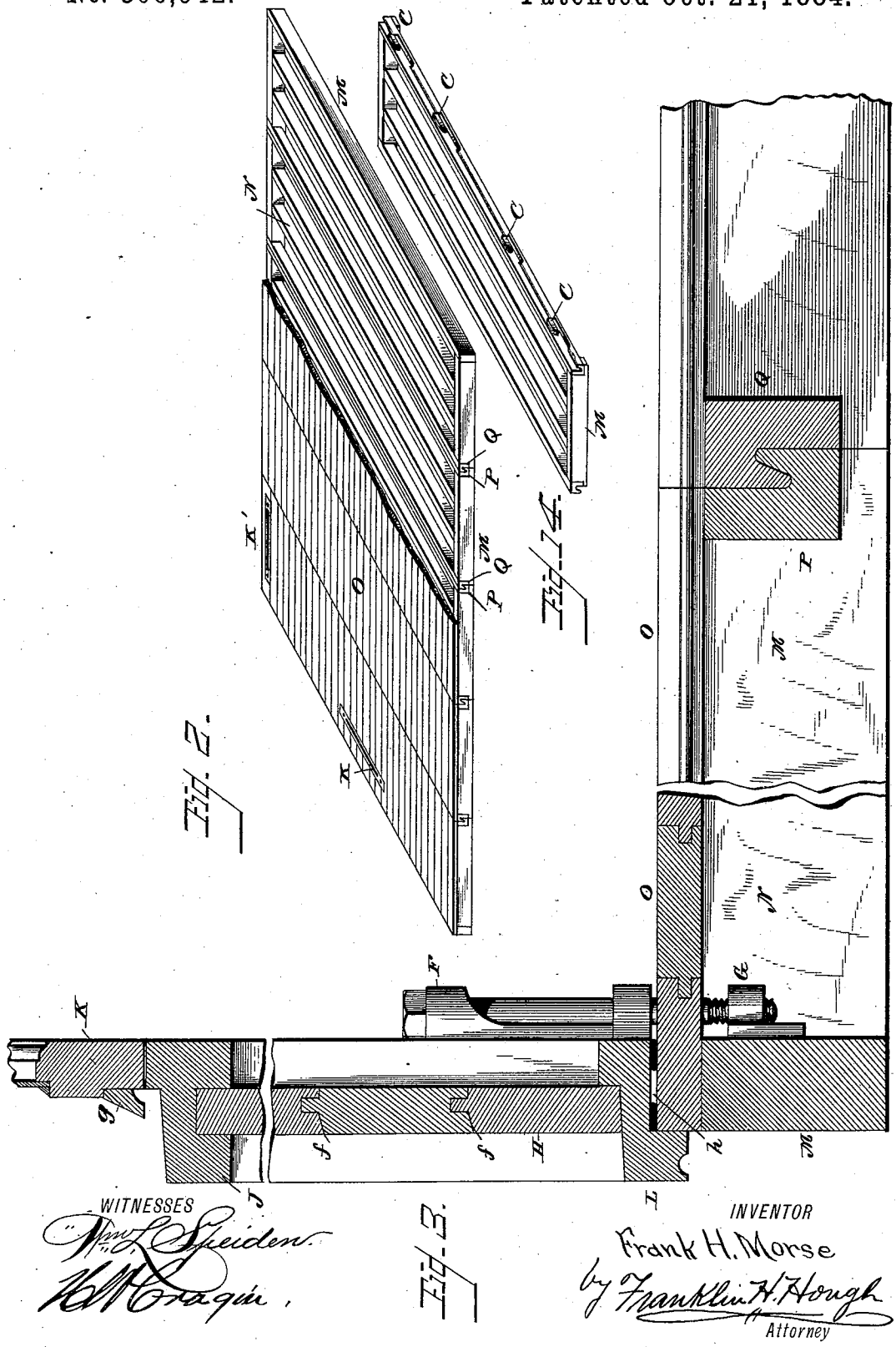
N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 3 Sheets—Sheet 2.

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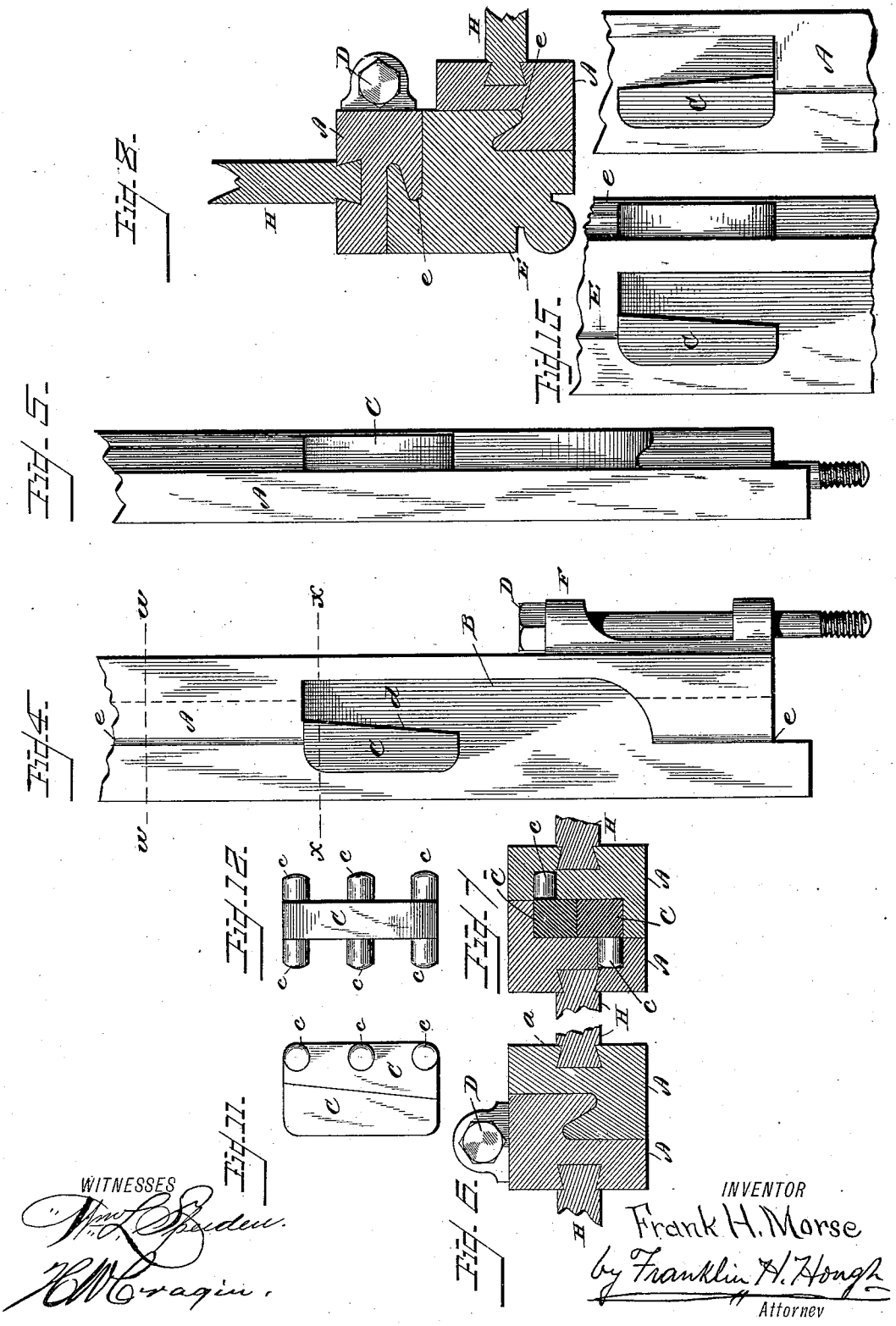
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(No Model.) 3 Sheets—Sheet 3.

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# UNITED STATES PATENT OFFICE.

FRANK H. MORSE, OF NEW ORLEANS, LOUISIANA.

## SECTIONAL HOUSE.

SPECIFICATION forming part of Letters Patent No. 306,942, dated October 21, 1884.

Application filed July 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK H. MORSE, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Sectional Houses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sectional buildings, and has for its object to provide a house consisting of sections which may be readily put together without the use of either nails or screws, and which, when the parts or sections are properly adjusted and locked, form a substantial, commodious, and serviceable building, adapted to all uses for which sectional buildings are constructed. When desired, the various sections may be separated without injury to any of the parts, which may be packed within a small compass, as a matter of convenience, either for storage or transportation. I accomplish this object in the manner hereinafter described, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification.

In the accompanying drawings, Figure 1 is a side elevation of my sectional house; Fig. 2, a perspective of floor; Fig. 3, a section through line *v v* of Fig. 1; Fig. 4, a side elevation of a section of one of the studs or stiles; Fig. 5, an edge view of same; Fig. 6, a section through line *w w* of Fig. 4; Fig. 7, a section through line *x x* of Fig. 4; Fig. 8, a horizontal section through one of the corners; Fig. 9, a section through line *y y* of Fig. 1; Fig. 10, a detail section through roof on line *z z* of Fig. 13; Figs. 11 and 12, detail views of metallic lock; Fig. 13, a side view of a section of one of the rafters, showing means of securing roof-strips and ribs. Fig. 14 is a perspective view of one of the sectional floor-frames detached, showing groove and locking-plates. Fig. 15 is a detail side view showing one of the corner-posts detached.

The uprights of the building, which form the frame-work for the panels constituting the walls of the building, are each composed of two longitudinal sections, one of which is shown in Figs. 4 and 5 of the drawings. One of the uprights is also shown in cross-section in Figs. 6 and 7. Each section is provided along one of its faces with a longitudinal dovetail groove, *a*, adapted to receive a dovetailed tongue, *b*, formed along the edge of the panels, and its opposite or meeting side provided with a longitudinal groove and beveled tongue or flange adapted to interlock, the groove having one of its sides, *e*, narrower than the opposite side, the side of the groove next to the narrower edge being beveled from its outer edge inwardly, as shown. At suitable intervals the narrower side of the groove is cut away, forming the recess or opening B, at one end of which a locking-plate, of iron or other metal, is secured, preferably by means of lugs or projections cast upon the under surface of the plate and adapted to enter the side of the upright. The inner face, *d*, of the locking-plate is beveled, as shown. The opposite or corresponding section of the upright is a counterpart of the first, having a similar recess, B, and a locking-plate, C, the position of the locking-plate being reversed or at opposite ends in the corresponding sections.

In adjusting the sections the tenon *e* of either section enters the corresponding groove in the opposite section, and by an endwise movement the locking-plates C C are forced to pass each other across their ends and slide one upon the other with their beveled faces *d d* in contact, and the sections are thus securely locked. Upon the inner side at the base of the upright is attached a metallic sleeve, F, adapted to receive the bolt D, which is passed through the same, its lower end entering the metallic keeper or stationary nut G, which is secured to the main sill of the building. The upright is thus held securely in position. The panel-sill L is provided upon its inner edge with an upwardly-inclined flange, against which the inner edge of the base of the panel fits, and the lower outer edge is extended downward, forming a shoulder adapted to bear against the outer edge of the flooring. Between the sill L and the floor O a rubber packing, *h*, is inserted.

The corners of the building are constructed as shown in Fig. 8. The corner-post E may be either round, square, or octagonal, and is provided upon two of its sides with longitudi-

nal beveled tongues adapted to enter the corresponding grooves in the sections of the uprights A A, and are secured therein by means of locking-plates in the manner heretofore described of securing the corresponding sections of uprights. The panels H are made, preferably, of tongued and grooved beaded ceiling, dovetailed at either end, as shown in Figs. 6 and 7. The outer shoulder of the tongue is beveled downward and outwardly, as shown at *f*, Figs. 3 and 9, thus preventing water from entering the joints. The lower surface of the window-sill J is provided with a longitudinal groove adapted to receive the upper edge of the panel which is extended above the top of the uprights, and thus serves the purpose of securing the sill in position. The upper surface of the window-sill is beveled downward and outwardly, and the lower outer edge of the window-sash is provided with the drip-strip *g*, as shown.

In constructing the gable the cross-timber V, extending across the end of the building along the upper edge of the lower panels, is provided upon its under side with a longitudinal groove, *t*, adapted to receive the upper edge of the panel, which is extended above the top of the uprights. Angular openings *u* are countersunk at suitable intervals in the groove, for the reception of the heads of the bolts *v*, used in securing the gable-sill to the cross-piece. The gable-sill W, which is attached to the cross-piece V by means of the bolt *v*, is provided upon its inner edge with an upward-inclined flange or shoulder, and its lower outer edge is extended downward, forming a flange or shoulder which bears against the outer face of the cross-timber V, as shown in Fig. 9.

The floor is constructed in sections corresponding in number and width with the number and width of the panels of the building, excepting the end sections, which are slightly narrower, and in consequence the corresponding joints may not be in the same line, each of the sections being composed of a rectangular frame, as shown in Fig. 14, provided with cross-joists N, to which the flooring is secured. The adjoining edges of the sectional floor-frames are provided with the nut-lock joint P Q, provided with locking-plates C, in all respects similar to the joints and locks used in securing the sectional uprights. One of the end sections of the floor is provided with spirit-levels *k k*, one being at the outer side and one at the end of the section, and by their use the building may be leveled perfectly. Although I have shown the levels as set in the floor, they may, if desired, be attached to the sills at the side and end of one of the sections.

The roof-covering consists of a series of longitudinally grooved or ribbed strips, *n n*, arranged so as to extend from the ridge to the eaves, each alternate strip being placed with the corrugated face downward and in such a position that the edges of the strip shall overlap the strips upon either side, and the tongue or bead extending along its edges upon the under side shall interlock with the groove or corrugation upon the upper surfaces of the adjoining strips. The roof-covering rests upon a series of cross pieces or ribs, and is secured thereto in the following manner. Each roofing-strip, having the corrugated face downward, is provided at intervals along its under surface with metallic tongues *o*, adapted to engage from the upper side with the hole in a metallic keeper, *r*, secured to the rib. The keeper *r* is preferably provided with shoulders *s*, extending from the upper edge of the rib and abutting against a groove running along the lower edge of roofing-strips upon either side of the keeper. The rib U is secured to the main rafters of the building by an ordinary barrel-bolt, *t*, which is attached to the side of the rafter in such a position as to enable the bolt, when forced out, to enter the hole *m* in the rib.

In case the house is intended for use in winter or in cold countries, the inside of the panels H may be lined with felt-paper and an inside ceiling of lumber used, the inside ceiling being so constructed as to have the boards run up and down the panels or in an opposite direction to the grain of the panel-boards.

It is evident that houses of this kind may be ornamented as elaborately as desired, by the use of scroll-work, &c., making a very attractive and handsome building. No nails or screws are used in its construction, a wrench being the only tool necessary for use in adjusting the various sections.

The house may be of any style or size, and contain any number of rooms desired, the partitions being constructed in the manner described for constructing the outside walls.

Verandas or galleries may be attached by the use of tongues and keepers similar to those used in attaching the roof-covering to the ribs.

Buildings have heretofore been constructed having panels composed of tongued and grooved parts, the ends of the panels being formed with dovetailed tongues fitting in corresponding grooves in uprights.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The upright of a sectional house, composed of two parts formed on their meeting faces with interlocking beveled flanges, and provided with locking-plates adapted to interlock with each other, substantially as described.

2. The upright for a sectional house, composed of two parts formed on their meeting faces with interlocking beveled flanges, and provided with locking-plates adapted to interlock with each other, and having dovetailed grooves formed in their opposite faces, substantially as described.

3. The corner-post of a house, having tongues and locking-plates on its sides, in combination

with uprights having corresponding tongues and locking-plates engaging the tongues and locking-plates of the corner-post.

4. A double upright for a sectional house, formed with interlocking tongues and grooves, and provided on its exterior with a sleeve for the passage of a clamping-bolt.

5. A panel for a sectional house, composed of a series of tongued and grooved parts, the meeting faces of said parts being beveled downwardly and outwardly, and the ends of said panels formed with dovetailed tongues, substantially as described.

6. The combination, with an upright formed with a dovetailed groove, of a panel composed of a series of parts having their meeting faces tongued and grooved and beveled downwardly and outwardly, and formed on its outer edges with a dovetailed tongue adapted to fit in the corresponding groove of the upright.

7. An upright for a sectional house, tongued and grooved, and provided with a locking-plate having a beveled face, substantially as and for the purposes described.

8. An upright for a sectional house, composed of two parts, each part provided with a plate having a beveled face adapted to engage with each other and lock the two parts together, substantially as described.

9. A sectional floor composed of a series of frames formed along adjacent sides with a longi udinal tongue and with locking-plates, whereby one section may be interlocked with another section, substantially as described.

10. A frame for a sectional floor, having two sides formed with a longitudinal tongue, and with locking-plates and flooring secured to its upper face, substantially as and for the purpose described.

11. A floor composed of a frame having flooring secured to one face, and provided with a spirit-level upon two of its sides, substantially as described.

12. A roof composed of a series of separable strips secured to a cross-piece by means of tongues on the strips entering openings in keepers secured to said cross-pieces.

13. A roof composed of a series of ribbed and grooved strips intermeshing with each other, each alternate strip being provided upon its under surface with a locking-tongue, in combination with a cross-piece formed with a keeper, with which the said locking-tongue engages to lock the series of strips together and hold them in place, substantially as described.

14. The roof-strip ribbed and provided with a locking-tongue, substantially as described.

15. The combination of the sill M, sill N, sill L, floor O, interposed packing *h*, the panels H, the upright provided with the sleeve F, the nut G, secured to the sill M, and the bolt passed through the sleeve and floor into said nut, substantially as described.

16. The combination of the upper and lower panels H, cross-timber V, the sill W, interposed between said cross-timber and upper panel, and the bolt *v*, passed through said sill and timber, substantially as and for the purpose described.

17. The locking-plate C, having a beveled face, and provided with pins projecting from its sides, substantially as described.

18. A sectional house having its sides and ends composed of a series of panels having tongued and grooved connection, with uprights formed in two parts, which are interlocked with each other by means of tongues and locking-plates, a floor composed of a series of frames interlocking with each other by means of tongues and locking-plates, each sectional frame having flooring secured to its upper face, and a roof composed of a series of intermeshing strips, one series of said strips being provided with tongues on their under faces, which engage with keepers attached to cross-pieces, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK H. MORSE.

Witnesses:
L. DEVELLE,
NUMA DELAUP.